

1. A splicing system capable of splicing successive rolls of supply web to provide a continuous web to an applicator, said system comprising:

a first and second roll of web supported respectively on first and second spindles for directing the first and second webs toward a splicing station;

a splicing station comprising knife elements for cutting a web passing through the splicing station;

staging areas where successive ends of the webs to be spliced are placed and held for splicing;

pinch rollers positioned one on each side of the web for closing on the first web and the free end of the second web to form a splice; and

a control capable of simultaneously closing the pinch rollers on the web and actuating a knife element to cut the first web.

2. The splicing system of claim 1 further comprising a first and a second series of rollers for placing a reverse curl in a web being unwound.

3. The splicing system of claim 1, wherein said staging areas comprise support plates for supporting a free end of the second web, said plates including a device being capable of actively holding the web ends in position on said plates.

4. The splicing system of claim 3, wherein said device capable of actively holding the web ends in position includes plates having a series of holes for placing subatmospheric pressure on one surface of the web such that the free end of the web remains in place on said plate prior to splicing the web.

5. The splicing system of claim 1, wherein said knife element comprises a cutting blade fixed along the path of the web, motor means and anvil means for moving the web into the cutting blade to cut the web, and means for separating the anvil and the cutting blade.

6. The splicing system of claim 5, wherein said cutting blade is positioned between two blocks guarding the cutting blade, said blocks and said anvil

each having surfaces adjacent the path of the web, said surfaces being coated with a release agent to prevent the web material from sticking to said anvil surface or to said block surfaces during the cutting operation, said motor means driving said blocks away from said anvil to expose said cutting blade upon operation thereof.

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7. The splicing system of claim 1, wherein said pinch rollers comprise a pair of rollers spaced apart along the path of the web, means for rapidly bringing the rollers toward each other to bring the web therebetween into intimate engagement, and motor means to bring the rollers together.

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8. The splicing system of claim 6, wherein said pinch roller comprises a pair of rollers spaced apart along the path of the web, means for rapidly bringing the rollers toward each other to bring the web therebetween into intimate engagement, and motor means to bring the rollers together and to simultaneously operate the cutting element to cut the first web.

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9. The splicing system of claim 3, wherein a splicing tape is positioned on the second web and extends into the pinch rollers to aid in splicing the first and second webs together.

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10. The splicing system of claim 8, wherein a splicing tape is positioned on the second web and extends into the pinch rollers to aid in splicing the first and second webs together.

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11. The splicing system of claim 3, wherein said applicator is a tape applicator for applying adhesive coated web to a carton.

12. A method of splicing successive webs of adhesive transfer tape to afford continuous feed of tape to an applicator, said method comprising:

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unwinding a first tape from a roll;

advancing the first tape through a knife element and pinch rollers to a guide roller and to an applicator;

unwinding a free end of a second tape from a roll and directing the tape about a roller and through a second knife element;

directing the free end of the second tape to a staging plate and holding the free end of the second tape in position;

5 placing a length of pressure sensitive adhesive splicing tape on the free end portion of the second tape, a free end portion of the splicing tape extending beyond the free end of said second tape material and to a position between two rollers of a pinch roll element;

10 bringing the splicing tape and the first tape into contact between the two rollers of the pinch roll element; and

simultaneously actuating the knife element to sever the first tape.

13. A method of splicing successive webs of adhesive transfer tape to afford continuous feed of tape to an applicator, said method comprising:

15 unwinding a first tape from a roll;

advancing the first tape around a first roller such that the direction of the first tape is substantially reversed;

advancing the first tape through a knife element and pinch rollers of a splicing element to a guide roller and to an applicator;

20 unwinding the free end of a second tape from a roll and directing the second tape about a roller to substantially reverse the direction of the second tape;

directing the free end of the second tape onto a staging plate and holding the same in position;

25 placing a length of pressure sensitive adhesive splicing tape on the end portion of the second tape with a free end portion of the splicing tape extending beyond the free end of said second tape and to a position between two rollers of a pinch roll element; and

30 simultaneously bringing the splicing tape and first tape into contact between the two rollers of the pinch roll element, and actuating the knife element to sever the first tape.

14. The method of claim 13 further comprising applying a negative pressure on one side of the second tape at said staging plate, and, upon closing the two rollers of the pinch roll element upon the splicing tape and the first tape, removing the negative pressure from said staging plate and operating said knife
5 element to sever the first tape.

15. The splicing system of claim 1, wherein said webs comprise a backing selected from the group consisting of paper, polymeric film and combinations thereof.

10 16. The splicing system of claim 1, wherein said webs comprise a paper backing.

17. The splicing system of claim 1, wherein said webs comprise a tacky adhesive.
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18. The splicing system of claim 1, wherein said tacky adhesive is selected from the group consisting of hot melt adhesive, hot melt remoistenable adhesive, water dispersible hot melt adhesive, biodegradable hot melt adhesive and repulpable hot melt adhesive.
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19. The splicing system of claim 9 wherein said splicing tape comprises pressure sensitive adhesive.

20. The splicing system of claim 15 wherein said backing further
25 comprises a release coating disposed on at least one surface of said backing.